

REMARKS

Entry of the above amendments is respectfully requested. Claims 1-5, 9-12, 19 and 21 have been amended. Claims 7, 13, 15-18, 20 and 22 have been cancelled. Claims 1-6, 8-12, 14, 19, 21 and 23 are pending in the application. Favorable reconsideration and allowance of this application is respectfully requested in light of the foregoing amendments and the remarks that follow.

Initially, Applicant acknowledges with appreciation the indication of allowable subject matter in claims 8-10, 19 and 21. However, in view of the present amendments and the below arguments, Applicant has chosen not to re-write these claims at this time.

Applicant also wishes to thank the Examiner for her proposal on September 21, 2005, regarding suggested amendments to the claims. Applicant has included most of the amendments suggested by the Examiner in that correspondence. However, Applicant did not amend claim 1 with all of the suggested amendments in the Examiner's proposal, namely, the amendment in the preamble of claim 1 and in the final wherein clause. In particular, Applicant believes claim 1 should be allowable without including all of these amendments as the applied references do not disclose each of the current limitations of the claims.

The preferred embodiments are directed to an adjustment device for a *fine machining tool* which is used to position one or more cutters of the tool with respect to a cutter support as accurately as possible. Although expansion chuck technology is used in the preferred embodiments, an offset of the cutter(s) with respect to the pressure chamber in the adjustment direction is used to finally adjust the position of the tool cutter with respect to the cutter support. Generally, an extension of the outer wall of the pressure chamber or rather the cutter support,

caused by application of pressure by a pressure transfer means in the pressure chamber, directly causes a positional displacement of the cutter. Through appropriate manipulation of the pressure generation device, the position of the cutter can be adjusted in the desired manner.

With respect to U.S. Pat. No. 6,270,295, which corresponds to WO 02/060624 A2 (co-pending European patent application), the tool disclosed has an axial slot so that the two halves of the tool can be spread apart by using fluid pressure. (See, *e.g.*, Figure 5, two-part construction 334, 336) By providing such an arrangement, the *Hyatt et al.* patent only allows radial adjustment of the cutting edges in order to achieve different diameters by controlling fluid pressure. More particularly, *Hyatt et al.* disclose a tool that, upon application of pressure, causes two-part separation of the tool end. In response, the two halves of the tool are deflected as a whole so that, if they are adjusted at all, the cutting edges are adjusted only at the end of the tool. Moreover, given the two-part separation of the tool end, the tool is limited to radial displacement of cutting edges which lie diametrically opposed to one another. As a result, there is no way to adjust cutting edges of a boring tool that has three circumferentially distributed cutting edges (for example, the so-called “Dreischneider”).

A still further effect of the two-part separation of the tool end is that it is only possible to adjust both the cutting edges either simultaneously, or when the slot (*e.g.*, Figure 5 or Figure 20, 938) lies outside the center, in a pre-determined proportion of the adjustment means. In other words, the cutting edges cannot be controlled individually and independently of one another. Finally, due to the two-part separation of the tool end, pressure fluid tends to leak from the tool ends so that as the two halves are spread apart the amount of pressure that can be generated is limited.

In contrast, as defined in claim 1, a cutter support wall is provided that is elastically deformable upon application of pressure by the pressure transfer means. To clarify this difference between the preferred embodiments and the prior art, Applicant has amended claim 1 to define the cutter support as being “substantially unitary.”

In view of the present amendments and the above arguments, claim 1 is not anticipated by the *Hyatt et al.* patent. Similarly, claims 2-6, 8-12, 14-18, 19, 21 and 23 dependent on allowable claim 1 are likewise allowable. An indication to this effect is respectfully requested.

Finally, note that Applicant also amended the Abstract of the Invention to obviate the Examiner’s objection. An indication to this effect is respectfully requested.

CONCLUSION

In view of the present amendments and the above arguments, it is submitted that claims 1-6, 9-12, 14, 19, 21 and 23 are in compliance with 35 U.S.C. Sections 102, 103 and 112 and as such each define patentable subject matter. A Notice of Allowability is therefore respectfully requested. The Examiner is invited to contact the undersigned by telephone if it would help expedite the prosecution and allowance of this application.

No fees are believed to be payable with this communication. Nevertheless, should the Examiner consider any other fees to be payable in conjunction with this or any future communication, the Director is authorized to direct payment of such fees, or credit any overpayment to Deposit Account No. 50-1170.

Respectfully submitted,



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